APEX FLAVORS, INC.

SAFETY DATA SHEET.



This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 21-May-2018 Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **COMPANY/UNDERTAKING**

1.1. Product identifier

Product Code(s) 273TTB

Product name GIN, NATURAL FLAVOR BLEND

Pure substance/mixture

Contains ETHYL ALCOHOL

Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Ingredient for further processing

No information available Uses advised against

1.3. Details of the supplier of the safety data sheet

Manufacturer Apex Flavors, Inc.

1371 Brass Mill Rd.

Suite A

Belcamp, MD 21017 (410) 565-6600

For further information, please contact:

E-mail Address cpisano@apexflavors.com

1.4. Emergency telephone number

Emergency telephone Chemtrec: 1-800-424-9300 for US/ 703-527-3887 outside US

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

112025111011 (20) 110 121212000	
Serious eye damage/eye irritation	Category 2 - (H319)
Carcinogenicity	Category 1A - (H350)
Chronic aquatic toxicity	Category 3 - (H412)
Flammable liquids	Category 2 - (H225)

2.2. Label elements

Product identifier Contains ETHYL ALCOHOL





Signal Word

Danger

Hazard Statements

H319 - Causes serious eye irritation

H350 - May cause cancer

H412 - Harmful to aquatic life with long lasting effects

Contains LIMONENE EUH208 - May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P273 - Avoid release to the environment

P370 + P378 - In case of fire: Use .? to extinguish

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

2.3. Other information

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
ETHYL ALCOHOL	200-578-6	64-17-5	50-90%	Flam. Liq. 2 (H225) Eye Irrit. 1 (H319)	No data available
PINENES	201-291-9	80-56-8	<1%	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available
LIMONENE	227-813-5	5989-27-5	<1%	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)	No data available
3-CARENE	236-719-3	13466-78-9	<1%	Aquatic Acute 2 (H401) Skin Sens. 1 (H317) Skin Irrit. 3 (H316) Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available
P-CYMENE	202-796-7	99-87-6	<1%	Aquatic Acute 2 (H401) Skin Irrit. 3 (H316) Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available
BENZALDEHYDE	202-860-4	100-52-7	<1%	Aquatic Acute 2 (H401) Skin Irrit. 3 (H316) Acute Tox. 4 (H302) Acute Tox. 5 (H313) Flam. Liq. 4 (H227)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Move to fresh air.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Main Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

Incompatible products

None known based on information supplied.

7.3 Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	The United Kingdom		Spain	Germany
ETHYL ALCOHOL	-	STEL: 3000 ppm	VME: 1000 ppm VME:	VLA-ED: 1000 ppm	-
64-17-5		STEL: 5760 mg/m ³	1900 mg/m ³	VLA-ED: 1910 mg/m ³	
		TWA: 1000 ppm TWA:	VLCT: 5000 ppm		
		1920 mg/m ³	VLCT: 9500 mg/m ³		
PINENES	-	-	=	VLA-ED: 20 ppm	
80-56-8				VLA-ED: 113 mg/m ³	
3-CARENE	=	-	=	VLA-ED: 20 ppm	=
13466-78-9				VLA-ED: 113 mg/m ³	
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
ETHYL ALCOHOL	-	TWA: 1000 ppm	Skin	TWA: 1000 ppm TWA:	TWA: 1000 ppm TWA:
64-17-5			STEL: 1900 mg/m ³	1900 mg/m ³	1900 mg/m ³
			TWA: 260 mg/m ³	STEL: 1300 ppm	
				STEL: 2500 mg/m ³	
PINENES	=	TWA: 20 ppm	=	=	=
80-56-8					
LIMONENE	=	-	=	TWA: 25 ppm TWA:	-
5989-27-5				140 mg/m ³	
				STEL: 50 ppm STEL:	
				280 mg/m ³	
3-CARENE	=	TWA: 20 ppm	=	=	=
13466-78-9					
P-CYMENE	=	-	=	=	TWA: 25 ppm TWA:
99-87-6					135 mg/m ³
BENZALDEHYDE	=	-	=	TWA: 1 ppm TWA: 4.4	-
100-52-7				mg/m³	
				STEL: 4 ppm STEL:	
				17.4 mg/m ³	
				Ceiling: 4 ppm Ceiling:	

				17.4 mg/m ³	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
ETHYL ALCOHOL	STEL 2000 ppm STEL	STEL: 1000 ppm	NDS: 1900 mg/m ³	TWA: 500 ppm TWA:	TWA: 1000 ppm TWA:
64-17-5	3800 mg/m ³	STEL: 1920 mg/m ³		950 mg/m ³	1900 mg/m ³
	MAK: 1000 ppm MAK:	MAK: 500 ppm MAK:		STEL: 625 ppm STEL:	
	1900 mg/m ³	960 mg/m ³		1187.5 mg/m ³	
PINENES	-	-	-	TWA: 25 ppm TWA:	-
80-56-8				140 mg/m ³	
				Skin	
				STEL: 37.5 ppm	
				STEL: 175 mg/m ³	
LIMONENE	-	STEL: 40 ppm STEL:	-	TWA: 25 ppm TWA:	-
5989-27-5		220 mg/m ³		140 mg/m ³	
		MAK: 20 ppm MAK:		STEL: 37.5 ppm	
		110 mg/m ³		STEL: 175 mg/m ³	
3-CARENE	-	-	-	TWA: 25 ppm TWA:	-
13466-78-9				140 mg/m ³	
				STEL: 37.5 ppm	
				STEL: 175 mg/m ³	
BENZALDEHYDE	-	-	NDSCh: 40 mg/m ³	-	-
100-52-7			NDS: 10 mg/m ³		

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration

No information available.

(PNEC)

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tightly fitting safety goggles. Skin and body protection Long sleeved clothing.

No information available. **Environmental Exposure Controls**

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state liquid **Appearance** clear

Odor characteristic of gin earthy

Color colorless

 Method Property Values

No information available pН Melting/freezing point No information available

Boiling point/boiling range FCC Method Flash Point 22 °C / 71 °F Closed cup

FCC Method **Evaporation rate**

Flammability (solid, gas) No information available

Flammability Limits in Air **Upper flammability limit** No information available lower flammability limit No information available

Vapor pressure mm Hg 20°C No information available Vapor density No information available Relative density No information available

Specific Gravity @ 25C 0.889 - 0.909 FCC Method Specific Gravity @ 20C 0.892 - 0.912 FCC Method **Refractive Index** 1.355 - 1.375 FCC Method

No information available Water solubility

Solubility in other solventsNo information availablePartition coefficient: n-octanol/waterNo information availableAutoignition temperatureNo information availableDecomposition temperatureNo information available

Viscosity, kinematic

Viscosity, dynamic

Explosive properties

No information available

No information available

No information available

No information available

Oxidizing Properties No informati

Softening point
Molecular Weight

No information available
No information available

VOC Content(%)

Density VALUE

Bulk Density VALUE

No information available
No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

9.2. Other information

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

10.3. Possibility of hazardous reactions

Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

InhalationThere is no data available for this product.Eye contactThere is no data available for this product.Skin contactThere is no data available for this product.IngestionThere is no data available for this product.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 7,244.00 mg/kg ATEmix (inhalation-dust/mist) 67,923.47 mg/l

Unknown Acute Toxicity

98.4022399% of the mixture consists of ingredient(s) of unknown toxicity.

37.2342399 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

98.4022399 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

98.4022399 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

98.4022399 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

37.2342399 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
ETHYL ALCOHOL	7060 mg/kg (Rat)		124.7 mg/L (Rat) 4 h
PINENES	2100 mg/kg (Rat)	5000 mg/kg (Rat)	

Skin corrosion/irritationNo information available.

Eye damage/irritation No information available.

Sensitization No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Specific target organ systemic toxicity (single exposure)

toxicity (single exposure)

No information available.

Specific target organ systemic toxicity (repeated exposure)

No information available.

Target Organ Effects Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system,

Skin.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Toxic to aquatic life Harmful to aquatic life with long lasting effects

37.23424% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ETHYL ALCOHOL	-	12.0 - 16.0: 96 h Oncorhynchus	9268 - 14221: 48 h Daphnia magna
		mykiss mL/L LC50 static 100: 96 h	mg/L LC50 10800: 24 h Daphnia
		Pimephales promelas mg/L LC50	magna mg/L EC50 2: 48 h Daphnia
		static 13400 - 15100: 96 h	magna mg/L EC50 Static
		Pimephales promelas mg/L LC50	
		flow-through	
PINENES	-	0.28: 96 h Pimephales promelas	41: 48 h Daphnia magna mg/L LC50
		mg/L LC50 static	
LIMONENE	-	0.619-0.796: 96 h Pimephales	-
		promelas mg/L LC50 flow-through	
		35: 96 h Oncorhynchus mykiss	

		mg/L LC50	
BENZALDEHYDE	-	0.8-1.44: 96 h Lepomis macrochirus	50: 24 h Daphnia magna mg/L
		mg/L LC50 flow-through 10.6-11.8:	EC50
		96 h Oncorhynchus mykiss mg/L	
		LC50 flow-through 12.69: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 6.8-8.53: 96 h Pimephales	
		promelas mg/L LC50 flow-through	
		7.5: 96 h Lepomis macrochirus	
		mg/L LC50 static	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical Name	log Pow
ETHYL ALCOHOL	-0.32
PINENES	4.1
P-CYMENE	4.1
BENZALDEHYDE	1.48

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Contaminated packaging Empty remaining contents.

Section 14: TRANSPORT INFORMATION

IMDG / IMO

14.1 UN/ID No 1197

14.2 Proper shipping name EXTRACTS, FLAVOURING, LIQUID

14.3 Hazard class 3 **14.4 Packing Group** II

DOT/ADR/RID

14.1 UN/ID No 1197

14.2 Proper shipping name EXTRACTS, FLAVOURING, LIQUID

14.3 Hazard class 3 14.4 Packing Group ||

ICAO/IATA

14.1 UN/ID No 1197

14.2 Proper shipping name EXTRACTS, FLAVOURING, LIQUID

14.3 Hazard class 3 14.4 Packing Group

14.5 Environmental hazard Not applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies

KECL -

PICCS Complies AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of R-phrases referred to under sections 2 and 3

R22 - Harmful if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under section 3

H401 - Toxic to aquatic life

H316 - Causes mild skin irritation

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

H227 - Combustible liquid

H317 - May cause an allergic skin reaction

H411 - Toxic to aquatic life with long lasting effects

H304 - May be fatal if swallowed and enters airways

H303 - May be harmful if swallowed

H226 - Flammable liquid and vapor

H400 - Very toxic to aquatic life

H315 - Causes skin irritation

H410 - Very toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA: Time weighted average STEL: Short term exposure limit

Ceiling: Maximum limit value: * Skin designation

Revision Date 21-May-2018

Reason for revision: Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.